

**INDUSTRIAL WASTEWATER DISCHARGE PERMIT
PLAN REVIEW SUBMITTAL GUIDELINES
APRIL 2005**

For businesses to be in compliance with the Revised Ordinances of Honolulu and current City & County of Honolulu Rules and Regulations, grease interceptors (GI) must be accessible for maintenance, inspection and sampling; and be adequately sized per the current sizing criteria. All plumbing fixtures that potentially discharge fats, oils and grease (FOG) must be connected to the GI. To expedite the Industrial Wastewater Discharge Permit (IWDP) plan review process, include the following with your submittal:

- Be sure you have obtained and reviewed the most current City application forms, policies and guidelines.
- Read the (IWDP) application carefully and provide all information requested including attachments. The (original) signature of the facility OWNER is required.
- Submit only those plans required to evaluate discharge to the sewers - Plumbing plans and Isometric drawings. Clearly label all equipment and fixtures. If legibly possible, submit half-sized plans (11" x 17").
- Include the GI detail and sample box detail (see attached sample) of the model proposed for installation.
- Provide the make and model number of the GI proposed for installation.
- Be sure the plans submitted for IWDP plan review are identical to the building permit plans. The Applicant is responsible for ensuring that revisions resulting from the IWDP review process are also reflected on the Building Permit record drawings.
- Connect all fixtures/equipment to the GI that are POTENTIAL FOG sources.
- Provide Drainage Fixture Unit (DFU) information and calculations (see attached sample table) which identifies the following: 1) Fixture Type, 2) Trap Size, 3) Total Number of each fixture type, 4) DFU Value, 5) Total DFU Value
- If using UPC Table 7-4 (intermittent flow such as condensation) to determine drainage fixture unit value, substantiate the lower DFU values by providing flow rates. (See attached sample).
- Provide a list and quantity of all equipment and fixtures (DON'T FORGET GARBAGE DISPOSALS AND DISHWASHERS).
- Clearly identify GI location and provide an effluent sampling point.
- All GI's must be accessible for maintenance, inspection, and sampling. (See attached Policy for GI Accessibility). Include the following certification statement on the plumbing and/or isometric plans to certify accessibility:

"Grease interceptor shall be installed such that it is easily accessible for inspection, cleaning and the removal of FOG and solid material in accordance with the current City and County of Honolulu Rules and Regulations."
- All GIs must be listed with the International Association of Plumbing & Mechanical Officials (IAPMO) and follow the Uniform Plumbing Code (UPC) standards. A Structural Engineer's stamp on the drawings will otherwise be required.
- Projects are approved based on the information submitted. Any subsequent changes (especially switching GI models) must be resubmitted for review and approval by the City's Department of Environmental Services. For more information, please call (808) 692-5593 or (808) 692-5137.

SAMPLE DRAINAGE FIXTURE UNIT CALCULATIONS

Fixture	Hard Connected	DFU Subtotal	Trap Size/Flow
3-Compartment Sink	1	4 x 1= 4	2"
Commercial Food-Waste Grinder	1	3 x 1= 3	2"
Dishwasher	1	6 x 1= 6	3"
Floor Drain	6	0 x 6= 0	
Floor Sink 2" (Freezer)	1	1 x 1= 1	Condensate – < 7 GPM
Floor Sink 2" (Ice Machine)	1	1 x 1= 1	Condensate – < 7 GPM
Floor Sink	4	4 x 4= 16	2"
Floor Sink 2" (Hand Sink)	2	1 x 2= 2	5.1 GPM
Mop Basin/Mop Sink	1	3 x 1= 3	3"

Total DFUs 36

Flow Calculation

$$DFU \leq 40: ((DFU) \ 36 \times 0.7) = (F) \ 25.2$$

GI Size Calculation

$$\text{Minimum Liquid Volume Capacity} \quad (F) \ 25.2 \times 30 \times 1.25 = (V) \ 945$$

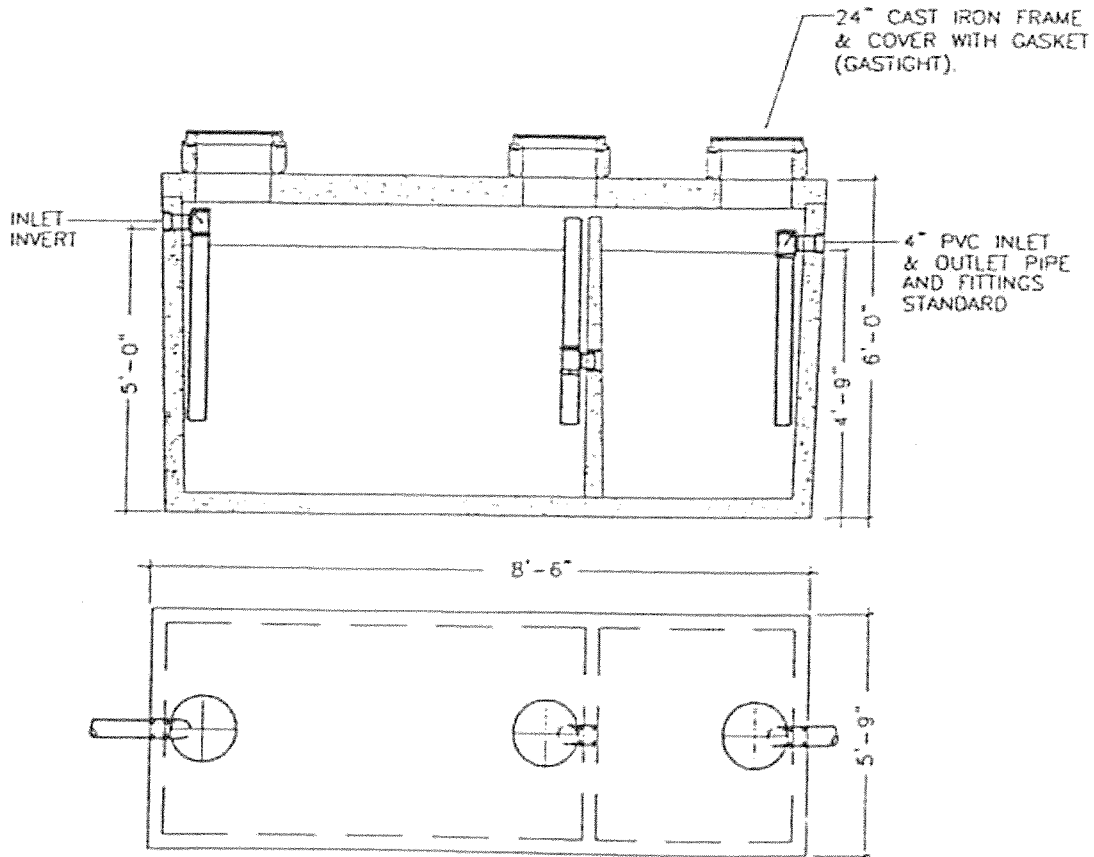
Minimum GI Size Required

945 Gallons

GI Size To Be Installed

1,000 Gallons

SAMPLE OF GREASE INTERCEPTOR DETAIL



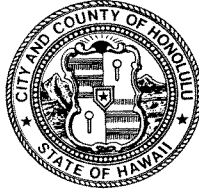
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M-3

GREASE INTERCEPTOR DETAIL

NTS

Note: Grease interceptor shall be installed such that all sanitary tees are accessible for inspection and maintenance.

MUFI HANNEMANN
Mayor



ERIC S. TAKAMURA, Ph.D., P.E.
Director

ATHAN K. ADACHI
Chief

ERC 06-233

DIVISION OF ENVIRONMENTAL QUALITY – REGULATORY CONTROL BRANCH

**Policy for
Grease Interceptor Accessibility
Revised August 2, 2006**

For a Grease Interceptor (GI) to comply with Revised Ordinances of Honolulu Chapter 14 and the Rules relating to Grease Interceptor Program Compliance:

“The Grease Interceptor shall be installed such that it is easily accessible for inspection, cleaning and the removal of FOG and solid material in accordance with the current City and County of Honolulu Rules and Regulations.”

This is to insure the GI will be easy to clean and inspect. There must be a headspace above the GI equal to the depth of the unit. This is necessary for the Wastewater Service Investigator (WWSI) to take a core sample from within the Grease Interceptor and to determine pumping frequency. The overall depth of the GI (from the GI floor to the finished grade) should not exceed 8 feet, which is the maximum length of the tube used to extract core samples. The interior of sanitary tees within the GI must be visible from above, so that they may be maintained and function properly.

A GI located in a parking stall will be considered inaccessible if a vehicle is parked above it. The stall should be designated as a loading zone or assigned to staff to allow the grease pumper or WWSI immediate access upon request.

For above grade units, lightweight aluminum or fiberglass manhole lids are preferred to traffic rated steel manhole covers. Acceptable non-traffic rated lids are the Orenco Model FL24G-4B, Sim/Tech Filter STF-APC24 or City & County of Honolulu Department of Environmental Services approved equal. Final design and assembly details for each lightweight lid installation must be approved as part of the Industrial Wastewater Discharge Permit application. If the lid requires tools to open, it is the responsibility of the business owner to keep the tools on-site, and to have their staff open the GI upon request by the WWSI.

For above grade GIs, the top of the interceptor is considered a raised working surface. Both the grease pumper and WWSI must work there safely. The permit holder shall be responsible for complying with OSHA and HIOSH regulations for safety, which may require the addition of safety features like railings.

Should a pumper or WWSI need to climb more than 2 feet off the ground to do their job, the permit holder must provide an OSHA compliant means of access. (i.e. stairs or stepladder). It must allow the WWSI or pumper to safely do their job. The permit holder is required to keep the stairs or ladder in good working condition and make them available upon request.

Failure to abide by these terms is considered a violation of GI accessibility requirement and will result in a failed inspection. The permit holder would be required to remedy the violation. Failure to comply may subject you to additional penalties and measures provided by City, State and Federal Laws. Possible penalties may include, but are not limited to, the following: permit suspension or revocation, termination of service and an administrative or civil penalty of not less than \$1,000.00 per violation per day.

A handwritten signature in black ink, reading "Athan K. Adachi".

ATHAN K. ADACHI
Chief